



Controlled Substances Board



WISCONSIN | **ePDMP**

Report 15

2020 Quarter 4 and Year-End Summary

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Introduction

This report is being provided pursuant to ss. 961.385 (5) – (6), Wis. Stats., which requires the Controlled Substances Board (CSB) to submit a quarterly report to the Wisconsin Department of Safety and Professional Services (DPS) about the Wisconsin Prescription Drug Monitoring Program (WI PDMP). This report is intended to satisfy that requirement for the fourth quarter of 2020 and will primarily focus on analysis of PDMP data from Q4 2020 and the preceding 12 months. For annual analysis of the WI PDMP from 2015 through 2019, see the Q4 2019 report found at <https://dps.wi.gov/Pages/BoardsCouncils/CSB/Reports.aspx>.

The WI PDMP was first deployed in June 2013. It is administered by DPS pursuant to the regulations and policies established by the CSB. An enhanced system, the WI ePDMP, was launched in January 2017, allowing the WI PDMP to become a multi-faceted tool in Wisconsin's efforts to address prescription drug abuse, misuse, and diversion through clinical decision support, prescribing practice assessment, communication among disciplines, and public health surveillance. Effective April 1, 2017, prescribers are required to check the WI ePDMP prior to issuing a prescription order for a monitored prescription drug, defined as controlled substance prescription drugs in Schedules II-V.

The WI ePDMP Public Statistics Dashboard (<https://pdmp.wi.gov/statistics>) provides interactive data visualizations for much of the data contained in this report, including county-level data for many of the charts.

User Satisfaction

A WI ePDMP user satisfaction survey was conducted in April 2018, and detailed results of the survey were provided in the Q2 2018 report. The survey indicated that most users are satisfied with the WI ePDMP, with 77% percent of respondents providing responses of either “Satisfied” or “Very Satisfied.”

User-led enhancements identified through the initial survey and refined via a subsequent user survey in January 2019 were prioritized for the 2019 and 2020 development timeline. These enhancements include:

- Streamlining the Patient Report to expand the use of visualization, reduce the need to scroll through the page, and add detail available in the dispensing detail;
- Improving the error correction/record voiding process used by dispensers to correct or void a previously reported dispensing record.

User-group and inbox feedback will continue to be utilized throughout the development process to ensure enhancements meet the needs of the WI ePDMP users. An additional user satisfaction survey will be conducted after implementation of the enhancements in 2021.

Impact on Referrals for Investigation

Pursuant to s. 961.385 (2) (f) and (3) (c), Wis. Stats., the CSB may disclose PDMP data to a licensing or regulatory board and refer for discipline a pharmacist, pharmacy, or practitioner who fails to comply with the rules of the Prescription Drug Monitoring Program or if circumstances indicate suspicious or critically dangerous conduct or practices of a pharmacy, pharmacist, practitioner, or patient. In 2018, the CSB Referral Criteria Workgroup was formed to develop recommendations for how the CSB could define suspicious or critically dangerous conduct or practices.

Based on the initial recommendations, the Wisconsin Medical Examining Board (MEB), Dentistry Examining Board (DEB), and Board of Nursing (BON) received summaries of the PDMP dispensing data specific to their professions at their meetings in the fall of 2018. Based on the data presented, the following actions occurred:

- The top seven physician (MD/DO) prescribers and the top seven physician assistant (PA) prescribers, based on opioid dispensing volume, were referred to the MEB.
- The top four dentistry prescribers, based on opioid dispensing volume, were referred to the DEB. An additional 12 dentistry prescribers were referred from the highest 1% of opioid prescribers for the profession for having written prescriptions for over three days without any indication of use of the WI ePDMP.
- The top four Advanced Practice Nurse Prescribers (APNP), based on opioid dispensing volume, were referred to the BON. The BON requested additional targeted outreach to over 800 APNPs who had an estimated WI ePDMP usage of less than 50% in an effort to educate these prescribers about the requirement to use the PDMP, as well as the tools available in the PDMP that can help promote safe prescribing practices.

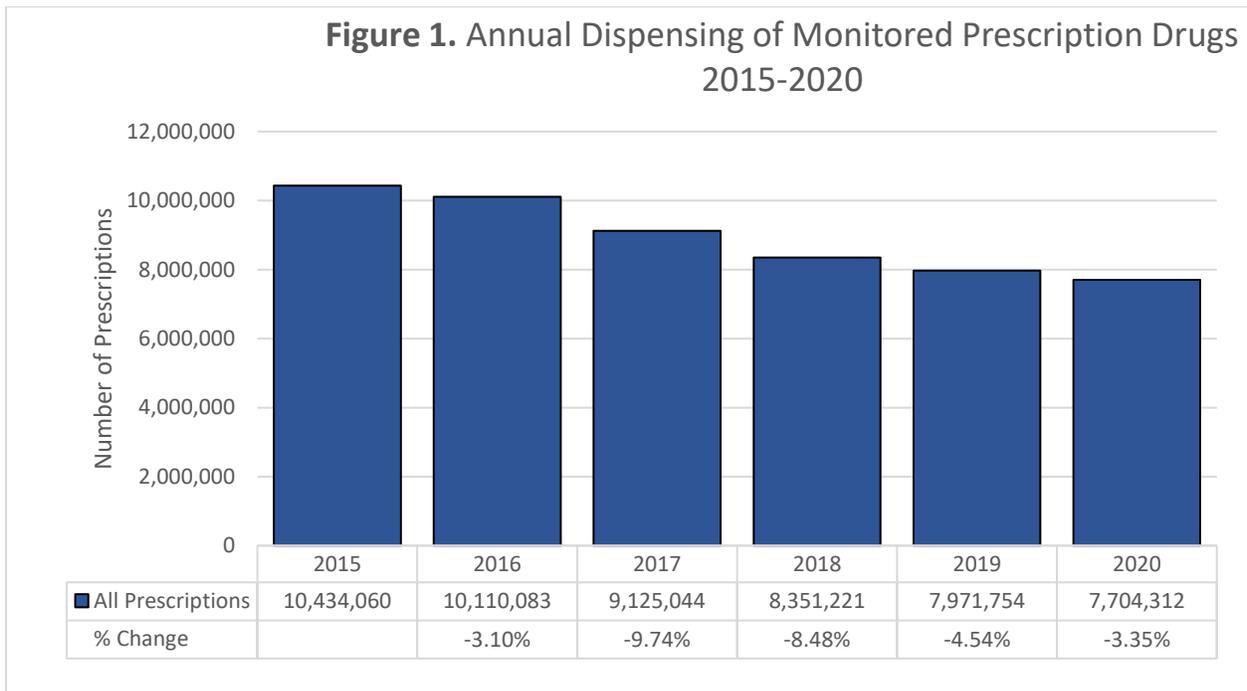
The CSB Referral Criteria Workgroup has continued to meet in 2020 to refine the process for using PDMP data to proactively monitor licensees and their prescribing practices for suspicious or critically dangerous conduct or practices and to determine when such activity should result in a referral to the appropriate examining board. Results of the current investigations will also be used by the CSB Referral Criteria Workgroup to guide the process of proactive monitoring and referrals. Due to the pandemic, the Workgroup was only able to meet once in 2020.

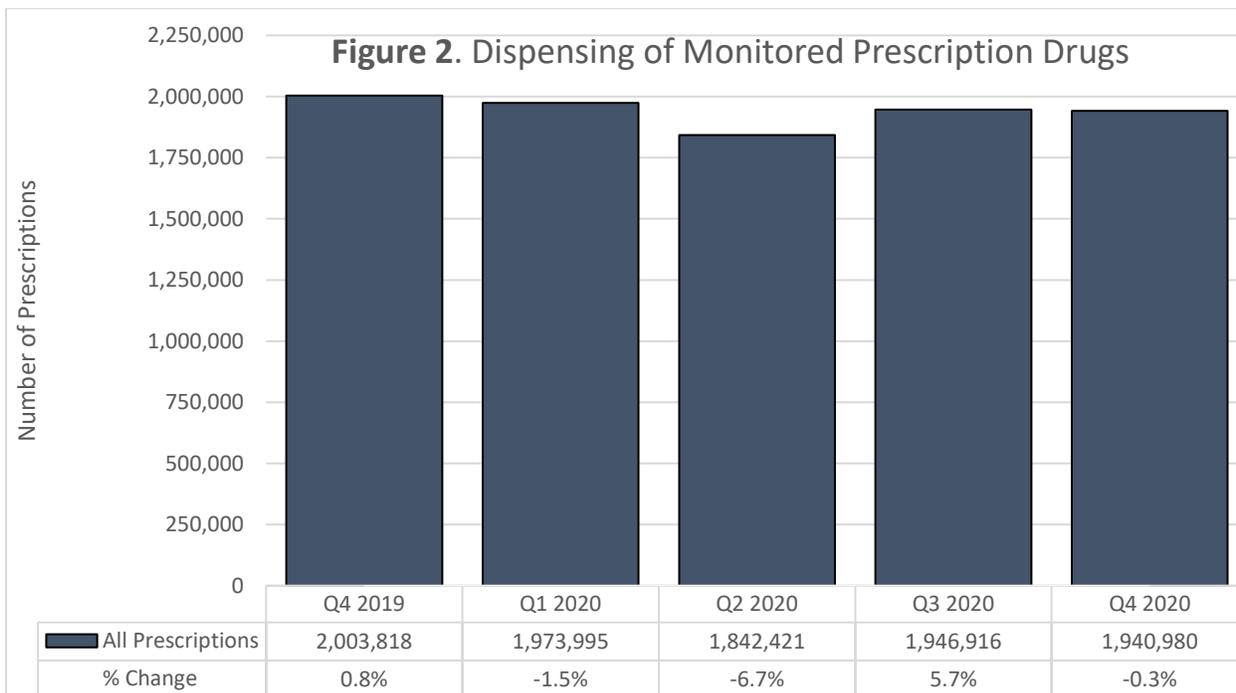
Additionally, the CSB conducts audits of dispenser requirements with the requirement to submit dispensing data to the WI ePDMP. Targeted outreach efforts are made after each audit in an attempt to bring all non-exempt licensed pharmacies into compliance with the requirement to submit and correct dispensing data. Pharmacies that appear to remain out of compliance after multiple outreach attempts are referred to the Pharmacy Examining Board (PEB). In Q1 2020, 23 pharmacies were identified for referral for possible noncompliance. Due to the pandemic, this was the only dispenser audit conducted in 2020.

Monitored Prescription Drug Dispensing Trend

The annual decreasing trend of the dispensing of monitored prescription drugs continued in Wisconsin. For 2020, the annual dispensing of monitored prescription drugs, defined as controlled substances in schedules II through V, had a decrease of more than 3% compared to 2019 (Figure 1) and 26% since 2015.

From Q3 to Q4 2020, the quarterly dispensing of all monitored prescription drugs slightly decreased by 0.3%. There was a notable reduction (nearly 7%) in the dispensing of monitored drugs from Q1 to Q2 when the pandemic began and clinical visits were restricted. After that, dispensing in Q3 and Q4 increased but remained below the pre-pandemic dispensing levels. Compared to the pre-pandemic Q1 2020, dispensing in Q4 2020 decreased by 1.6%. Compared to the dispensing levels of the same time period in Q4 2019, it was a 3% decrease in the Q4 2020 dispensing (Figure 2).





The breakdown of the four drug classes shows some promising trends in Wisconsin despite the pandemic (Figure 3). Specifically, the annual dispensing of opioids decreased by 6% from 2019 to 2020, and 38% in the past six years since 2015 (Figure 4).

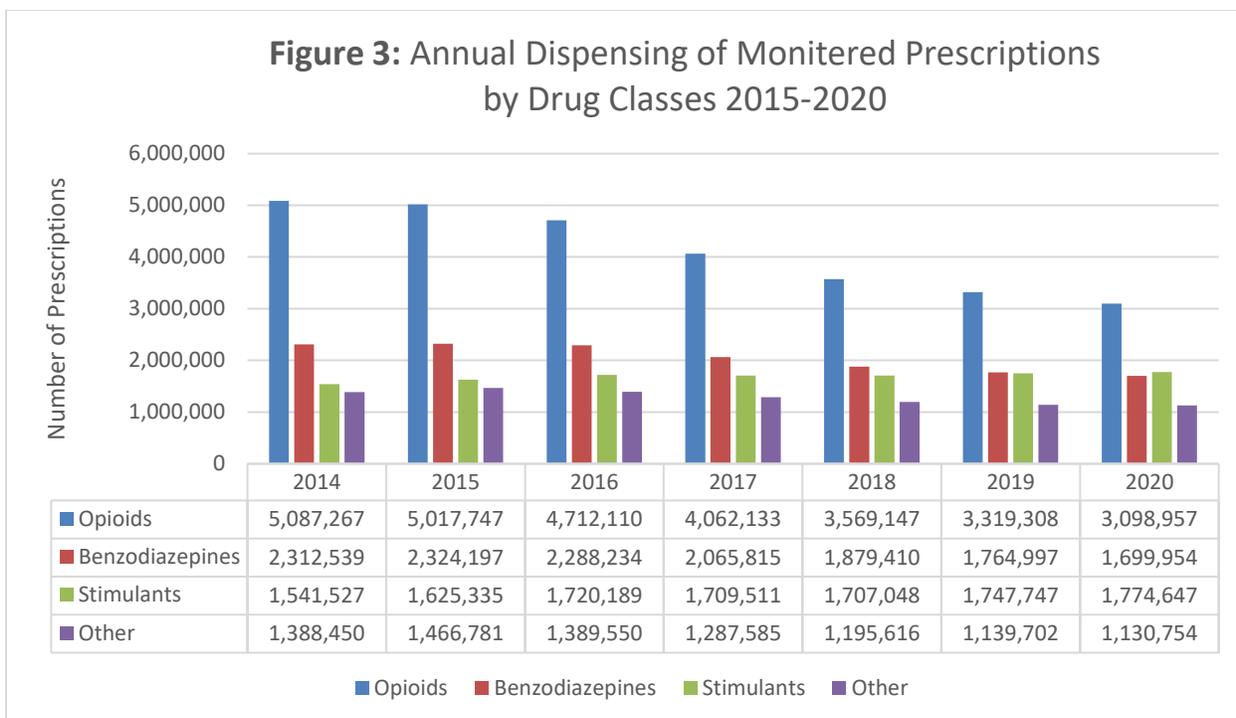
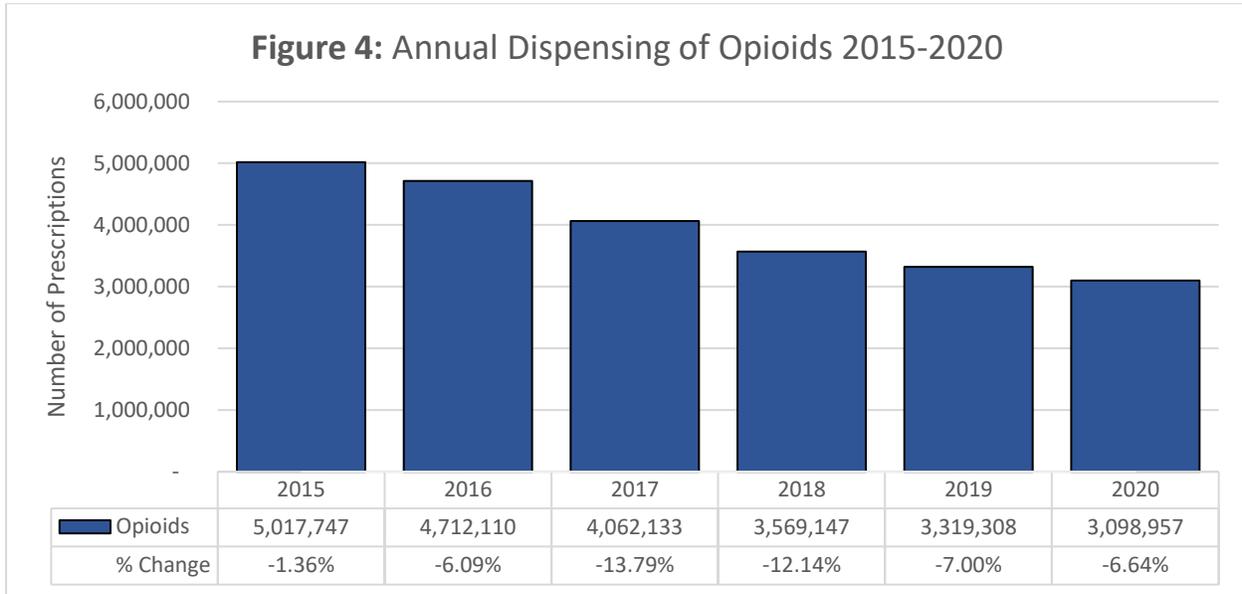
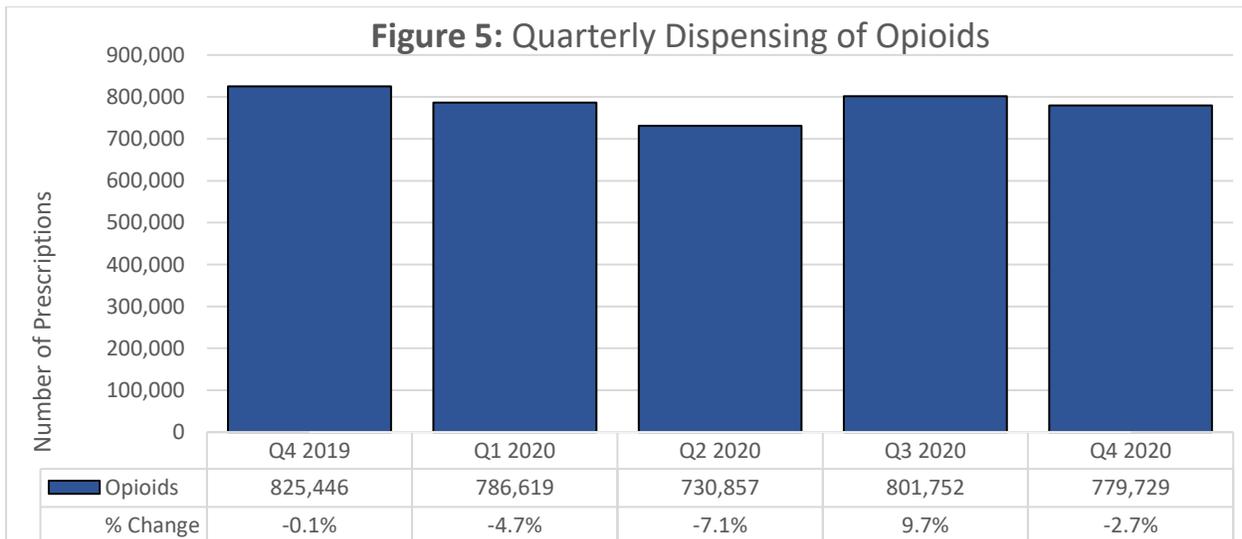


Figure 4: Annual Dispensing of Opioids 2015-2020



Quarterly data from the ePDMP show that opioid dispensing from Q3 2020 to Q4 2020 decreased by nearly 3%, and 5% since Q4 2019 (Figure 5). Opioid dispensing in Q4 rebounded after a steep decrease in Q2 but remained lower than the pre-pandemic dispensing levels.

Figure 5: Quarterly Dispensing of Opioids



The annual dispensing of benzodiazepine also decreased by more than 3% from 2019 to 2020, and 27% since 2015 (Figure 6). Quarterly dispensing of benzodiazepine from Q3 2020 to Q4 2020 decreased by nearly 1% after a notable increase from Q2 to Q3 2020 but remain lower than the pre-pandemic dispensing levels (Figure 7). Q4 dispensing equates to a 3.6% reduction from the dispensing levels of Q4 2019.

Figure 6: Annual Dispensing of Benzodiazepines 2015-2020

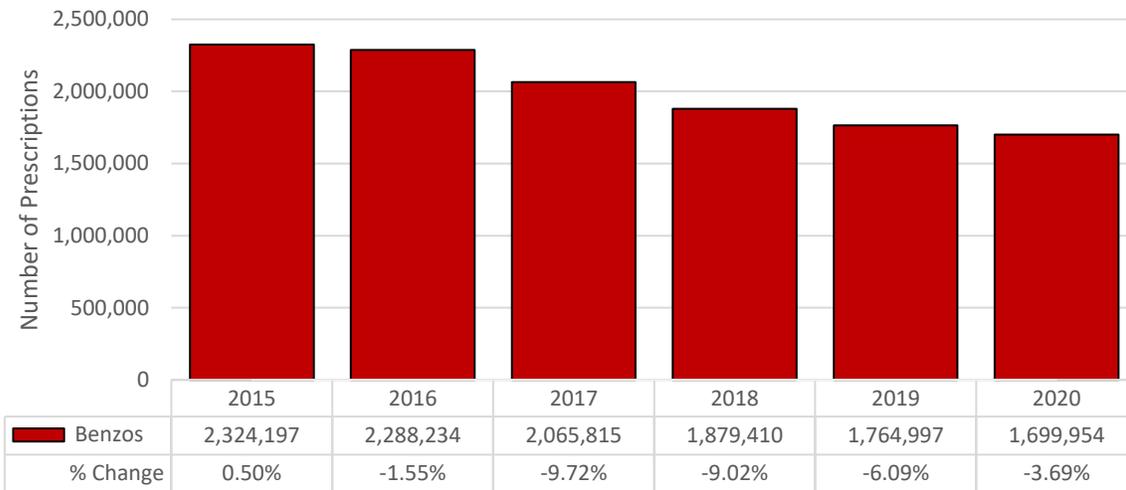
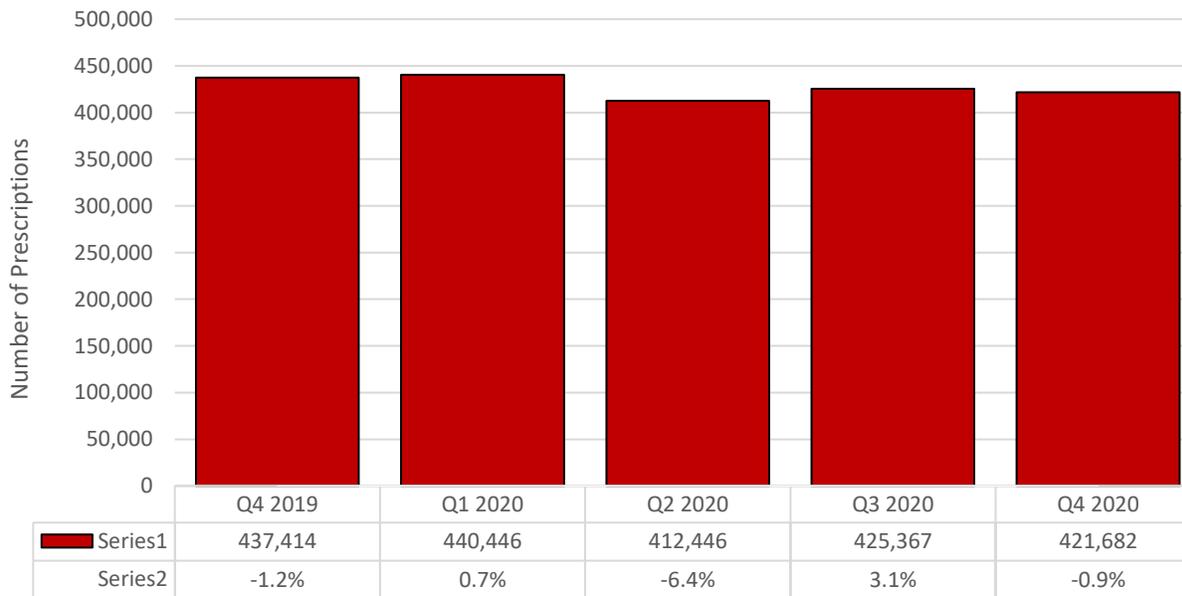


Figure 7: Quarterly Dispensing of Benzodiazepines



The increasing trend of stimulant dispensing continued between 2019 and 2020 by 1.5%, and 9% since 2015 (Figure 8).

The quarterly dispensing of stimulants increased after a notable reduction in Q2 2020 when the pandemic began. It is noteworthy that the total dispensing of stimulants in Q4 2020 increased by 5.3% compared to Q3 2020; This number exceeded the pre-pandemic levels in Q1 2020 by 0.5% which equates a 1.3% increase from the dispensing levels during the same time period in Q4 2019 (Figure 9).

Figure 8: Annual Dispensing of Stimulants 2015-2020

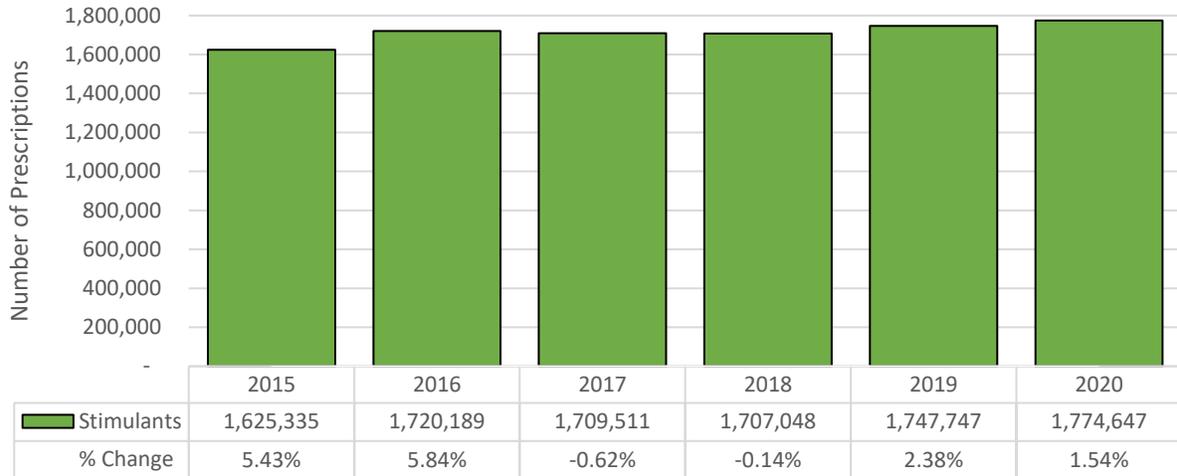
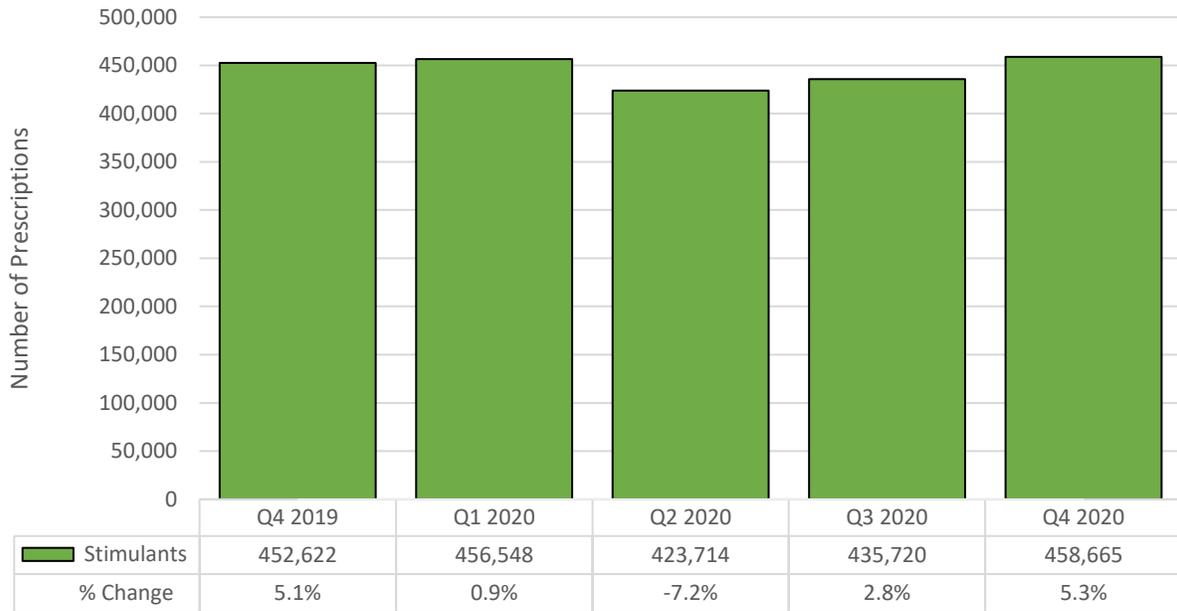


Figure 9: Quarterly Dispensing of Stimulants



Top 15 Dispensed Monitored Prescription Drugs

Table 1 shows the annual top 15 most dispensed monitored prescription drugs in 2020 compared to 2019, ranked in order of the number of prescriptions dispensed in 2020. The order has remained the same in the past two years, and notably the overall dispensing has decreased. The largest decreases were found in Oxycodone w/ Acetaminophen (11.9%), Diazepam (10.2%), Pregabalin (10%) and Hydrocodone-Acetaminophen (9.2%).

Table 2 shows the top 15 most dispensed monitored prescription drugs in Q4 2020 compared to Q3 2020, ranked in order of the number of prescriptions dispensed in Q4 2020. The order of the top 15 drugs dispensed in recent quarters has been consistent overall. The top 15 drugs make up nearly 88% of the dispensing of monitored prescription drugs for any given quarter. The order of the top 15 drugs dispensed in recent quarters has been consistent overall.

The increased trend of the stimulant classification continues, including Methylphenidate HCl (6.7%), and Amphetamine-Dextroamphetamine (3.3.8%), except for Zolpidem Tartrate that has a slight decrease (0.3%).

The dispensing of Buprenorphine HCl-Naloxone HCl Dihydrate, one of the medications commonly used as part of Medication-Assisted Treatment (MAT) for opioid use disorder, continues to rise steadily (4.6%). Note that this does not include dispensing that occurs at most opioid treatment programs due to federal regulation 42 CFR Part 2, which has recently been revised to permit federally funded opioid treatment programs from reporting dispensing data to state PDMPs pending patient consent and in pursuant to the state statutes. Buprenorphine HCl-Naloxone HCl Dihydrate was the 13th most dispensed monitored prescription drug in Q4 2020, with an increase of over 4.6% from Q3 2020 to Q4 2020. This equates to an increase of nearly 20% in the past 12 months and a notable 55% increase since Q3 2018, the first quarter when Buprenorphine HCl-Naloxone HCl Dihydrate moved into the top 15 dispensed monitored prescription drugs.

	Drug Name	Drug Class	2019 Dispensing	2020 Dispensing	Percent Change
1	Hydrocodone-Acetaminophen	Opioid	1,087,728	987,437	-9.2%
2	Amphetamine-Dextroamphetamine	Stimulant	808,265	830,402	+2.7%
3	Tramadol HCl	Opioid	676,831	631,468	-6.7%
4	Lorazepam	Benzodiazepine	556,002	540,704	-2.8%
5	Alprazolam	Benzodiazepine	534,641	514,823	-3.7%
6	Oxycodone HCl	Opioid	522,645	498,470	-4.6%
7	Clonazepam	Benzodiazepine	464,538	450,868	-2.9%
8	Zolpidem Tartrate	Other	437,075	419,309	-4.1%
9	Lisdexamfetamine Dimesylate	Stimulant	394,296	404,843	+2.7%
10	Methylphenidate HCl	Stimulant	390,228	383,152	-1.8%
11	Oxycodone w/ Acetaminophen	Opioid	332,782	293,064	-11.9%
12	Pregabalin	Other	240,408	216,366	-10.0%
13	Buprenorphine HCl-Naloxone HCl Dihydrate	Opioid	193,192	230,213	+10.0%

14	Diazepam	Benzodiazepine	185,333	166,462	-10.2%
15	Morphine Sulfate	Opioid	162,794	146,683	-9.9%

Table 2: Top 15 Dispensed Monitored Prescription Drug by Dispensing

	Drug Name	Drug Class	Q3 2020 Dispensing	Q4 2020 Dispensing	Percent Change
1	Hydrocodone-Acetaminophen	Opioid	258,990	248,901	-3.9%
2	Amphetamine-Dextroamphetamine	Stimulant	206,912	213,719	+3.3%
3	Tramadol HCl	Opioid	161,238	155,092	-3.8%
4	Lorazepam	Benzodiazepine	135,451	134,033	-1.0%
5	Oxycodone HCl	Benzodiazepine	131,318	128,625	-2.1%
6	Alprazolam	Opioid	127,656	127,020	-0.5%
7	Clonazepam	Benzodiazepine	112,357	112,032	-0.3%
8	Lisdexamfetamine Dimesylate	Other	98,934	106,137	+7.3%
9	Zolpidem Tartrate	Stimulant	105,079	104,769	-0.3%
10	Methylphenidate HCl	Stimulant	92,109	98,303	+6.7%
11	Oxycodone w/ Acetaminophen	Opioid	75,900	74,028	-2.5%
12	Pregabalin	Other	66,163	66,921	+1.1%
13	Buprenorphine HCl-Naloxone HCl Dihydrate	Opioid	58,677	61,374	+4.6%
14	Diazepam	Benzodiazepine	43,133	42,184	-2.3%
15	Morphine Sulfate	Opioid	37,016	35,523	-4.0%

Data-Driven Alerts

The WI ePDMP application performs sophisticated data analytics on a patient's prescription history to assess the patient's monitored prescription drug history and to alert WI ePDMP users to potential indications of abuse or diversion, such as early refills and multiple prescribers or dispensers, or factors that increase overdose risk, such as high morphine milligram equivalent (MME) doses and overlapping benzodiazepine and opioid prescriptions. Data-driven alerts are presented on the patient report to call attention to specific detail from the dispensing data.

The 6 types of data-driven concerning patient history alerts are:

1. **Concurrent Benzodiazepine and Opioid Prescription Alert**, which indicates when a patient's active current prescriptions include both an opioid and a benzodiazepine, a combination that significantly increases the patient's risk of overdose.
2. **Long-Term Opioid Therapy with Multiple Prescribers Alert**, which indicates when a patient has been prescribed at least one opioid prescription from two or more prescribers for 90 or more days.
3. **High Daily Dose of Opioids Alert**, which indicates when a patient's active current prescriptions are estimated to provide a daily dose of opioids that exceeds 90 MME, thereby increasing the patient's risk of overdose.
4. **Early Refill Alert**, which indicates when a patient has refilled a controlled substance prescription two or more days earlier than the expected refill date based on the estimated duration of the prescription calculated and reported by the pharmacy.
5. **Multiple Prescribers or Pharmacies Alert**, which indicates that the patient has obtained prescriptions from at least five prescribers or five pharmacies within the previous 90 days. The five prescribers or dispensers may be associated with the same clinic, practice or location, but the WI ePDMP still views them as separate prescribers/dispensers. This alert is not a direct indication of doctor shopping; it is simply a flag for further inspection of the dispensing history.
6. **Multiple Same Day Prescriptions Alert**, which indicates when a patient has received the same controlled substance drug from multiple prescribers or pharmacies on the same day.

Overall, the annual number of concerning patient history alerts generated by analytics of the dispensing data has continued to decrease since 2017. In 2020, the total alerts decreased by less than 1% from 2019 and 43% from 2017.

The quarterly number of concerning patient alerts has continued to increase slightly since Q2. It was a 4.3% increase from Q3 to Q4 in 2020. Most notable is the increase in Concurrent Benzodiazepine and Opioid Alert (6.7%) and Multiple Prescribers or Pharmacies Alert (4.5%) from Q3 to Q4 2020. Among the most frequently occurring alerts, Concurrent Benzodiazepine and Opioid Prescriptions Alert, the number of occurrences in Q4 2020 was 3% higher than the same quarter in 2019 and 34% lower than the first quarter the alerts were made available to WI ePDMP users in Q1 2017. The rate of occurrence of the Multiple Prescribers or Pharmacies Alert in Q4 2020 was nearly 4% lower than the same quarter in 2019 and nearly 52% lower than the first quarter the alerts were made available to WI ePDMP users in Q1 2017.

See Figure 10 below for details on the overall volume of alerts by alert type since the WI ePDMP was launched in Q1 2017, and Table 3 for the percent changes of all data-driven alert types that occurred from Q1 2017 to Q4 2020.

Values for preceding quarters may be modified after the conclusion of a quarter, based on the duration of prescriptions that bridge quarters, which is why it is important to view the number of occurrences for Q4 2020 not only in relation to the preceding quarter, but also in relation to the same quarter of the previous year, as well as a part of the overall trend compared to the first quarters during which the alerts were presented to WI ePDMP users.

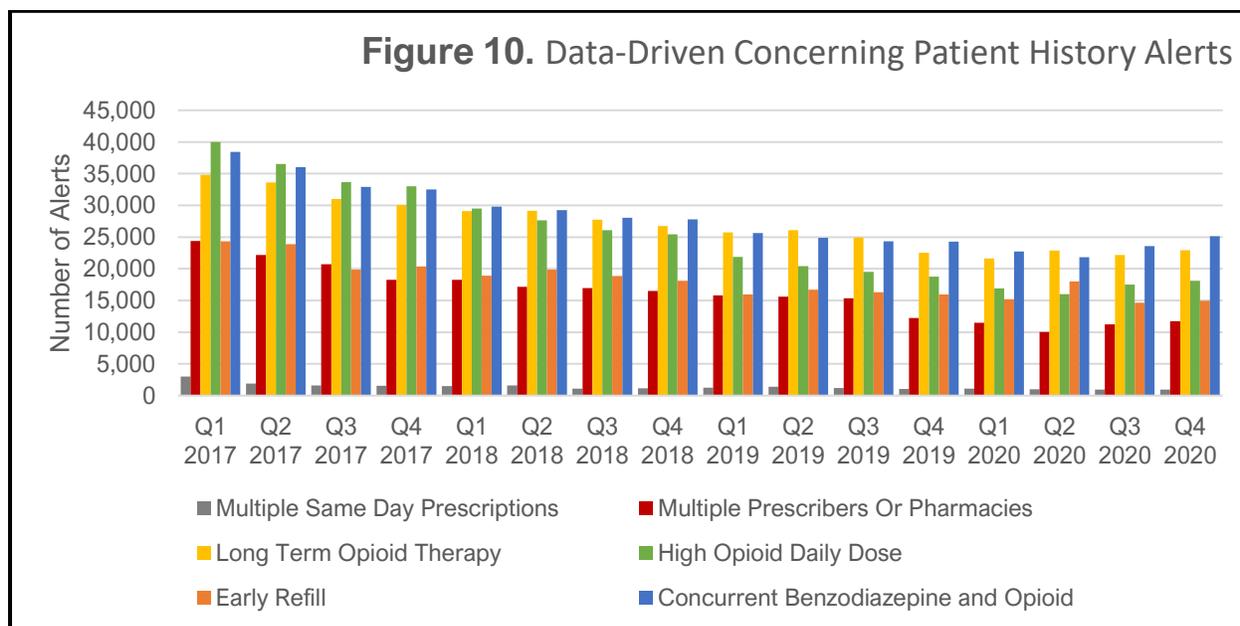
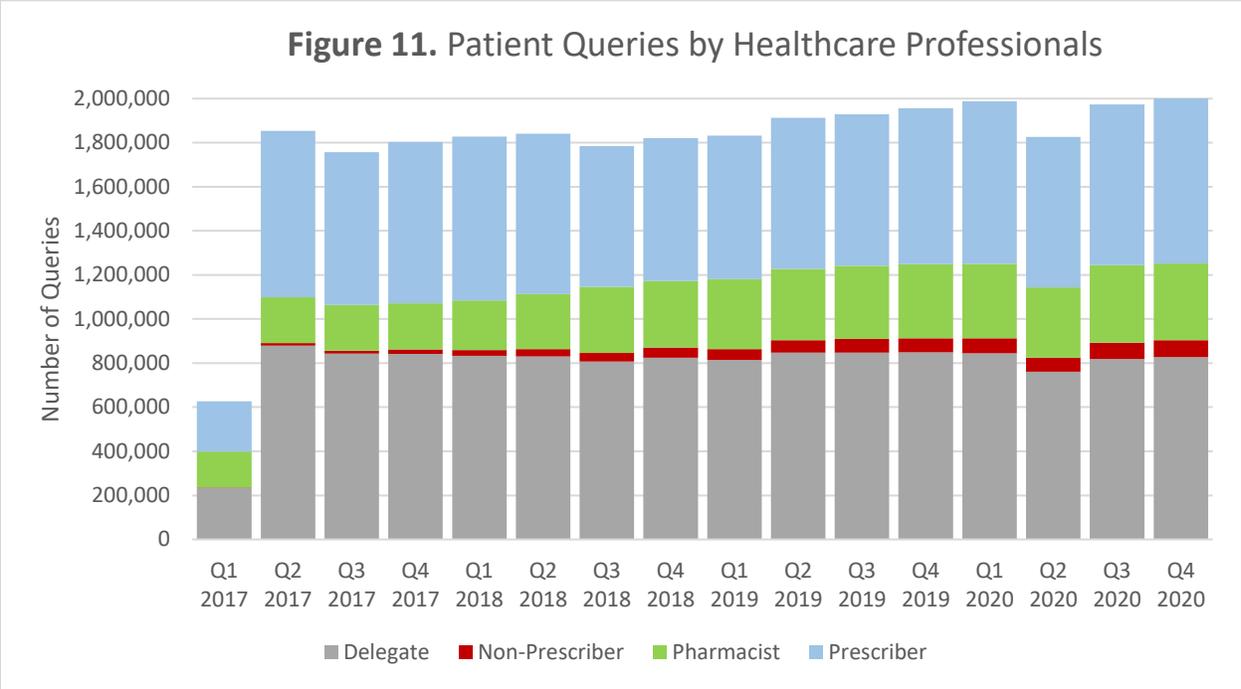


Table 3. Concerning Patient History Alerts Listed by Volume of Alerts Generated

	Alert Type	Q1 2017	Q4 2020	Percent Change
1	Concurrent Benzodiazepine and Opioid	38,446	25,150	-34.6%
2	Long-Term Opioid Therapy	34,819	22,912	-34.2%
3	High Opioid Daily Dose	40,005	18,129	-54.7%
4	Early Refill	24,354	14,969	-38.5%
5	Multiple Prescribers or Pharmacies	24,379	11,757	-51.8%
6	Multiple Same Day Prescriptions	3,009	924	--69.3%
	All Alert Types	165,012	93,841	-43.1%

Disclosure of WI PDMP Data

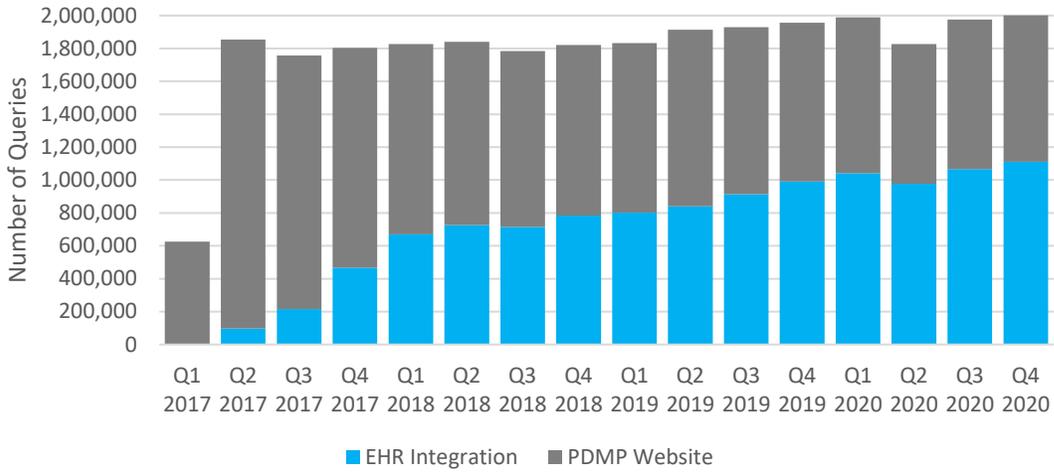
In 2020, healthcare users made over 7,790,000 patient queries in the WI ePDMP, which is an increase of 2% compared to 2019. Between October 1 and December 31 (Q4), 2020, healthcare users made a total of 2,000,584 patient queries, a slight increase compared to Q3 2020 by 1%. Breaking down the queries by user type shows that 41% of the queries were performed by delegates of prescribers or pharmacists, 37% were performed by prescribers, 17% by pharmacists, and nearly 4% by other non-prescribing healthcare professionals.



The WI ePDMP connected to five new-state PDMPs in addition to the Military Health System via the National Association of Boards of Pharmacy’s PMP InterConnect (PMPi) and the RxCheck interstate data sharing hub during 2020, bringing the total to 28 connections. The interstate data exchange allows healthcare users to expand the WI ePDMP patient query to return results from PDMPs in other states, including Wisconsin’s border states of Minnesota, Michigan, Illinois, Iowa, and Indiana.

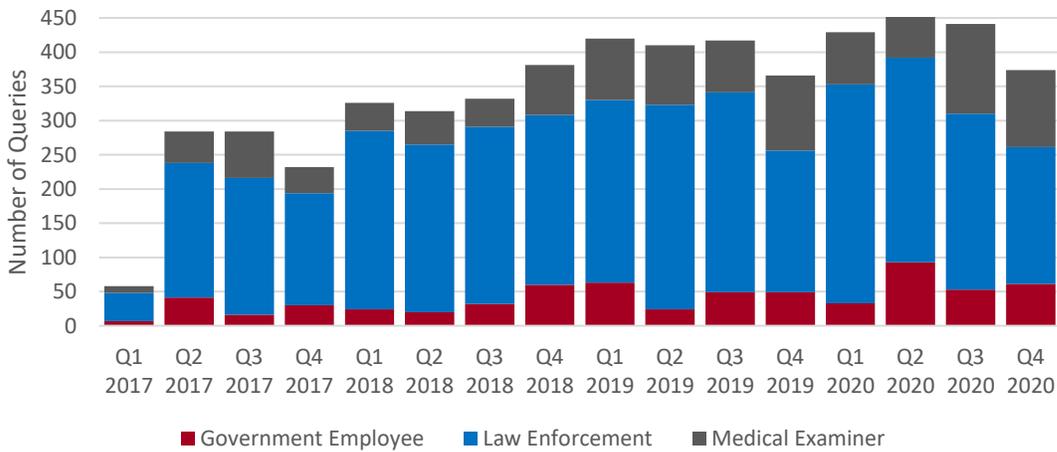
Healthcare professionals from 19 health systems in Wisconsin now have one-click access to the PDMP from within their electronic health record (EHR) platform in order to facilitate patient queries within a provider’s workflow. Figure 12 below shows that, in Q4 2020, over 55% of patient queries were through the direct EHR integration, which is up from 51% in Q4 2019, the first quarter where EHR integration accounted for more than 50% of queries.

Figure 12. WI ePDMP Patient Queries by Source



Authorized individuals from non-healthcare groups made a total of 374 requests for PDMP data in Q4 2020, which is a 15% decrease over the previous quarter. Authorized law enforcement queries make up 53% of the non-healthcare queries.

Figure 13. Queries by Non-Healthcare Account Type



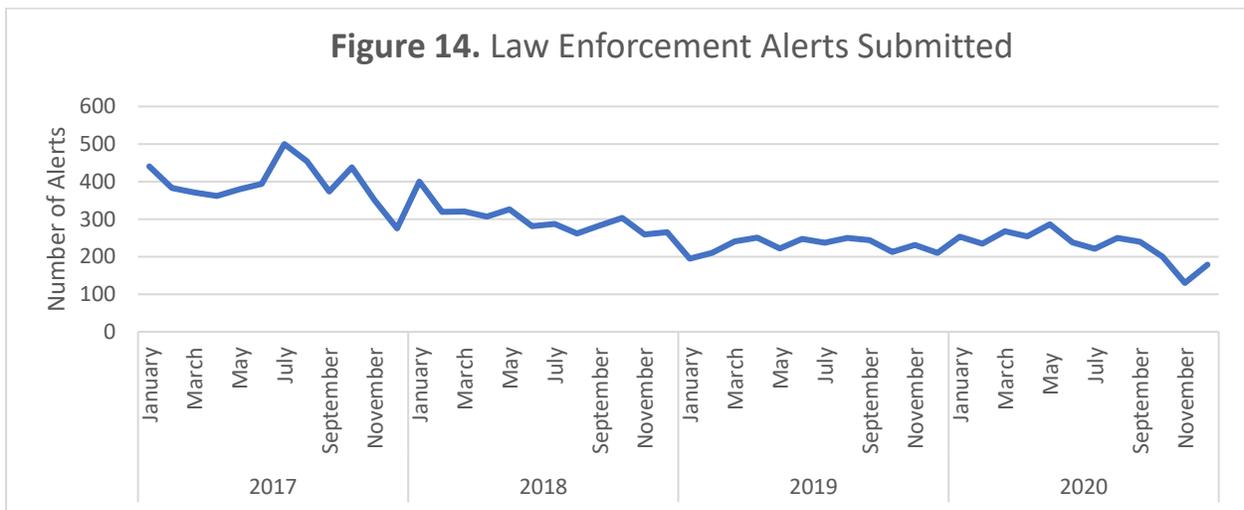
Law Enforcement Reports

During 2020, there were 2,754 events reported to the WI ePDMP by Wisconsin law enforcement agencies, which was a slight increase from 2,751 reported events in 2019 and a 40% decrease compared to 2017 when the data was first made available.

In Q4 2020, there were 510 events reported to the WI ePDMP by Wisconsin law enforcement agencies as required by s. 961.37 (3) (a), Wis. Stat. The law requires the agencies to submit a report in each of the following situations:

1. When a law enforcement officer receives a report of a stolen controlled substance prescription.
2. When a law enforcement officer reasonably suspects that a violation of the Controlled Substances Act involving a prescribed drug is occurring or has occurred.
3. When a law enforcement officer believes someone is undergoing or has immediately prior experienced an opioid-related drug overdose.
4. When a law enforcement officer believes someone died as a result of using a narcotic drug.

Prescribers of patients associated with these events receive a proactive email notice from the WI ePDMP, in addition to the event being captured as an alert on the patient report in the WI ePDMP. Figure 13 shows the number of law enforcement reports submitted to the WI ePDMP by month since the WI ePDMP was launched. There is no statutory requirement for law enforcement agencies to submit their reports within a certain timeframe after the date of the event, and outreach efforts continue to emphasize the value that law enforcement reporting brings for healthcare clinical decision making.



The distribution of submission by report type varied from one quarter to the next. Among the total 2,754 alerts submitted by Law Enforcement entities in 2020, The distribution by report type can be seen below:

- 46% of the reports submitted were for suspected non-fatal opioid-related overdose events, which was an increase from 35% in 2019. In 2020, a total of 1,279 events were reported to the ePDMP, which was 304 more than 2019.
- 28% of the reports submitted were reports of stolen controlled substance prescriptions, which was a decrease from 40% in 2019.
- 18% of the reports submitted were for suspected violations of the Controlled Substances Act, which was a slight decrease from 20% in 2019.
- 7% of the reports submitted were for suspected narcotic-related deaths, an increase from 5% in 2019.

Summary

The decreasing trend of the annual dispensing of monitored prescription drugs continued in Wisconsin. For 2020, the total dispensing of monitored prescription drugs decreased by more than 3% compared to 2019, and 26% since 2015. The breakdown of the four drug classes shows more promising trends in Wisconsin despite the pandemic. Specifically, the annual dispensing of opioids decreased by 6% from 2019 to 2020, and 38% since 2015. The annual dispensing of benzodiazepine also decreased by more than 3%, and 27% since 2015.

- The number of opioid prescriptions dispensed in 2020 decreased by 6.6% compared to the previous year.
- The number of benzodiazepine prescriptions dispensed in 2020 decreased by 3.7% compared to the previous year.
- The dispensing of stimulant prescriptions dispensed in 2020 increased by 1.5% compared to the previous year.

The number of patient queries performed per month has remained consistent. This indicates that the WI ePDMP continues to be a valuable tool to support safe prescribing, treatment, and dispensing decisions.

The fourth quarter of 2020 shows a continuation of the overall trend of consistency in dispensing of monitored prescription drugs compared to the pre-pandemic levels. From Q3 to Q4 2020, the quarterly dispensing of all monitored prescription drugs slightly decreased by 0.3%. There was a notable 7% decrease in the dispensing of monitored drugs from Q1 to Q2 when the pandemic began, and clinical visits were restricted. Since then, the total dispensing in Q3 and Q4 has increased but remained below the pre-pandemic dispensing levels. This phenomenon was observed across drug classes except stimulants. The increasing trend of the dispensing of stimulants continued after a decrease in Q2 when the pandemic began, and the dispensing of stimulants in Q4 exceeded the pre-pandemic levels.

Overall dispensing rates of monitored prescription drugs remain significantly lower compared with the same quarter five years ago.

- The number of monitored prescription drugs dispensed in Q4 2020 was 28% lower than Q4 2015.
- The number of opioid prescriptions dispensed in Q4 2020 was 39% lower than Q4 2015.
- The number of benzodiazepine prescriptions dispensed in Q4 2020 was 30% lower than Q4 2015.

Encouraging trends found in the WI ePDMP continued in 2020:

- The annual top 15 most dispensed monitored prescription drugs in 2020 compared to 2019 has notably decreased. The greatest decreases were found in Oxycodone w/ Acetaminophen (11.9%), Diazepam (10.2%), Pregabalin (10%) and Hydrocodone-Acetaminophen (9.2%).
- The dispensing of Buprenorphine HCl-Naloxone HCl Dihydrate (Suboxone®), one of the medications commonly used as part of Medication-Assisted Treatment (MAT) for opioid use disorder, continued to increase by 5.6% in Q4 2020 compared to Q3 2020, which equates to an increase of 20% over the past 12 months and a notable 55% increase since Q3 2018, the first quarter when Buprenorphine HCl-Naloxone HCl Dihydrate moved into the top 15 dispensed

monitored prescription drugs. The occurrence of data-driven concerning patient history alerts, including measures that indicate drug seeking behaviors and increased risk for overdose, overall continued to decline. The total alerts of 2020 decreased by 11% compared with 2019 and by 39% since 2017.

Additional detail about the WI ePDMP data, including county-level detail for many of the charts, can be found on the WI ePDMP Public Statistics Dashboard (<https://pdmp.wi.gov/statistics>), under the corresponding tabs of Controlled Substance Dispensing, PDMP Utilization, and Law Enforcement Alerts.